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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Nagaraja Rao

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EXAMINER

OKORONKWO, CHINWENDU C

ART UNIT

PAPER NUMBER

2436

MAIL DATE

DELIVERY MODE

12/08/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/809,628	Applicant(s) RAO ET AL.	
	Examiner CHINWENDU C. OKORONKWO	Art Unit 2436	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 August 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 and 7-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5 and 7-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. In response to communications filed on 08/22/2008, the Examiner acknowledges the amendments made to the claims and have both considered and applied them to the claims.

1.1 Claims 1-5 and 7-15 are pending examination.

Response to Remarks/Arguments

2. Applicant's arguments with respect to the rejection of the claims have been fully considered but they are not persuasive.

2.1 In response to Applicant argument that neither Lumme nor Gosewehr reference does not teach or suggest sending a database of the switch to a vendor, nor do they teach or suggest enabling the vendor to upgrade the software while being prevented from decrypting data, in addition to the previous citation, the Examiner respectfully disagrees citing Gosewehr 1:61 – 2:43 which recites, "switching centers that may easily undergo on-line software upgrades" and 3:5-11 which recites, "installing an upgraded first call process server application on the first CAN, such that an upgraded first primary call process of the upgraded first call process server application executes on the first CAN and creates on the first CAN an upgraded first backup call process of the upgraded first call process server application" and 9:22-25 which recites, "an online software upgrade process." It would have been obvious for one of ordinary skill in the

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art to, at the time of the invention, to combine the interception system and method of Lumme et al. with the system and method of maintenance of a switching node, the motivation and benefit being that there is a need for “switching node technology [to] constantly improve to [handle] escalated service demands (1:13-14 of Gosewehr).”

Additionally, without such a feature the “downtime can be costly for end-offices, in that determining the source of, and troubleshooting, the problem can take hours and even days (1:22-24).” Therefore it would have been obvious that “one solution currently adopted by switch manufacturers involves adding both hardware and software maintenance features to the switch to simplify the troubleshooting efforts of technicians (1:27-30).”

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 1-5 and 7-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lumme et al. (US Patent No. 6,711,689 B2) in view of Gosewehr (U.S. Patent No. 7,308,491 B2)

Regarding claims 1, Lumme et al., discloses a method for providing maintenance operations for a switch of a telecommunications service provider, while securing lawful intercept related data collected by the switch and stored in a database of the switch, comprising the steps of:

encrypting a portion of the database including the intercept related data (4:65 – “secure data encryption”) and storing the portion of the database that is encrypted in the database (5:15-16 – “stored interception database on a external command”);

sending the database including the portion of the database that is encrypted to end or located outside the telecommunications service provider and the vendor preventing the vendor from decrypting the portion of the database including the intercept related data without authorization from the telecommunications (4:62-67 – “interception data collection means may be arranged to create a secure tunnel by a secure authentication, wherein the collected intercepted data is transferred via said tunnel using a secure data encryption” and 5:1-52 - “a secure authentication and tunneling may be performed by using VPN or SSH ... [and] the network element may be arranged to store entries for authenticated interception destinations which can set and reset the interception information.” Lumme et al. further recites, “transmitting collected intercepted data from the first network element to an interception browsing element, browsing the transmitted

intercepted data at the interception browsing element based on an external command from a second network element having an interception activation and deactivation function ... the intercepted data may be received from the network element having the interception data collection function via a secure tunnel”).

Lumme et al. is silent in disclosing a switch within a switching center in which upgrading a portion of the database including upgradable control data for controlling the switch, which is within the switching center of the telecommunication service provider, by another entity outside the telecommunications service provider, however Gosewehr does disclose these features (1:61 – 2:43 – “switching centers that may easily undergo on-line software upgrades” and 3:5-11 – “installing an upgraded first call process server application on the first CAN, such that an upgraded first primary call process of the upgraded first call process server application executes on the first CAN and creates on the first CAN an upgraded first backup call process of the upgraded first call process server application” and 9:22-25 – “an online software upgrade process”). It would have been obvious for one of ordinary skill in the art to, at the time of the invention, to combine the interception system and method of Lumme et al. with the system and method of maintenance of a switching node, the motivation and benefit being that there is a need for “switching node technology [to] constantly improve to [handle] escalated service demands (1:13-14).”

Additionally, without such a feature the “downtime can be costly for end-offices, in that determining the source of, and troubleshooting, the problem can take hours and even days (1:22-24).” Therefore it would have been obvious that “one solution currently adopted by switch manufacturers involves adding both hardware and software maintenance features to the switch to simplify the troubleshooting efforts of technicians (1:27-30).”

Regarding claim 2, Lumme et al., discloses the method according to claim 1, further comprising the step of creating a logical key at the telecommunications company that allows the portion of the database including the intercept related data to be decrypted (8:47-67 and 9:52-56).

Regarding claim 3, Lumme et al., discloses the method according to claim 1, further comprising the step of inserting the logical key into the portion of the database including the intercept related data to be encrypted (4:62-67 and 5:1-3).

Regarding claim 4, Lumme et al., discloses the method according to claim 1, further comprising the step of creating the key creates a software key that is used for the encryption of the portion of the database including the intercept related data (10:66-67 and 11:1-39).

Regarding claim 5, Lumme et al., discloses the method according to claim 1, further comprising the step of blocking access to display commands that cause the portion of the database including the intercept related data to be displayed by the switch (3:26-36).

Regarding claim 7, Lumme et al., discloses the method according to claim 1, further comprising the step of upgrading by the vendor without providing access to the sensitive intercept related data (8:47-67 and 9:52-56).

Regarding claim 8, Lumme et al., discloses the method according to claim 1, further comprising the step of storing programming code for controlling the switch in the portion of the database including the intercept related data (3:26-59).

Regarding claim 9, Lumme et al., discloses the method according to claim 1, further comprising the step of providing protection for the intercept related data in accordance with a lawful intercept legislation (1:32-52).

Regarding claim 10, Lumme et al., discloses the method according to claim 9, wherein the lawful intercept legislation is CALEA (1:32-52).

Regarding claim 11, the Examiner rejects these claims under the same rationale as claim 1.

Regarding claim 12, the Examiner rejects these claims under the same rationale as claim 1.

Regarding claim 13, the Examiner rejects these claims under the same rationale as claim 1.

Regarding claim 14, Lumme et al., discloses the apparatus according to claim 11, further comprising a vendor switch (1:31-32).

Regarding claim 15, Lumme et al., discloses the apparatus according to claim 14, wherein the vendor switch is programmed to prevent display of commands that cause the portion of the database including the intercept related data to be displayed (1:20-41).

Conclusion

4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHINWENDU C. OKORONKWO whose telephone number is (571)272-2662. The examiner can normally be reached on MWF 2:30 - 6:00, TR 9:00-3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nasser Moazzami can be reached on (571) 272 4195. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/C. C. O./
Examiner, Art Unit 2436

/Carl Colin/
Primary Examiner, Art Unit 2436
12/5/2008

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